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Environment Friendly Mitigation Of Heavy Metals From Vegetables Using Low-Cost Agents

Seema Manwani, Garima Awasthi*

Department of Life Sciences, Vivekananda Global University, Jaipur, 303012

*Email:garima.awasthi@vgu.ac.in

Environment pollution caused by heavy metals has been notified as a global concern since the beginning of industrialization and urbanization. Contamination due to heavy metal instigates serious hazards to plants, humans and to the environment because of its toxic nature. Vegetables comprise the essential and nutritious part of human diet as it contains a lot of minerals and vitamins. Intake of these heavy metals through food leads to many health issues because of their bio-accumulation and non-biodegradable nature. Vegetables get contaminated through waste water and sewage water used for irrigation, industrial effluents, use of chemical fertilizers and pesticides etc. Arsenic, Cadmium and Lead are most pervasive metals which can create harmful effects even at very low concentrations. There-fore it is necessary to treat vegetables and remove these metals before consuming. Conventional remediation methods are not economical and may not be eco-friendly and also generates large amount of waste. There are several washing agents like sodium carbonate, citric acid, lemon extract, ginger solution etc. which can be used to remove surface contamination from vegetables. This article summarizes best suitable mitigation strategies for heavy metals (As, Cd and Pb) from vegetables through different washing treatments. **Keywords-** Heavy metals, Contamination, Vegetables, Arsenic, Cadmium and Lead